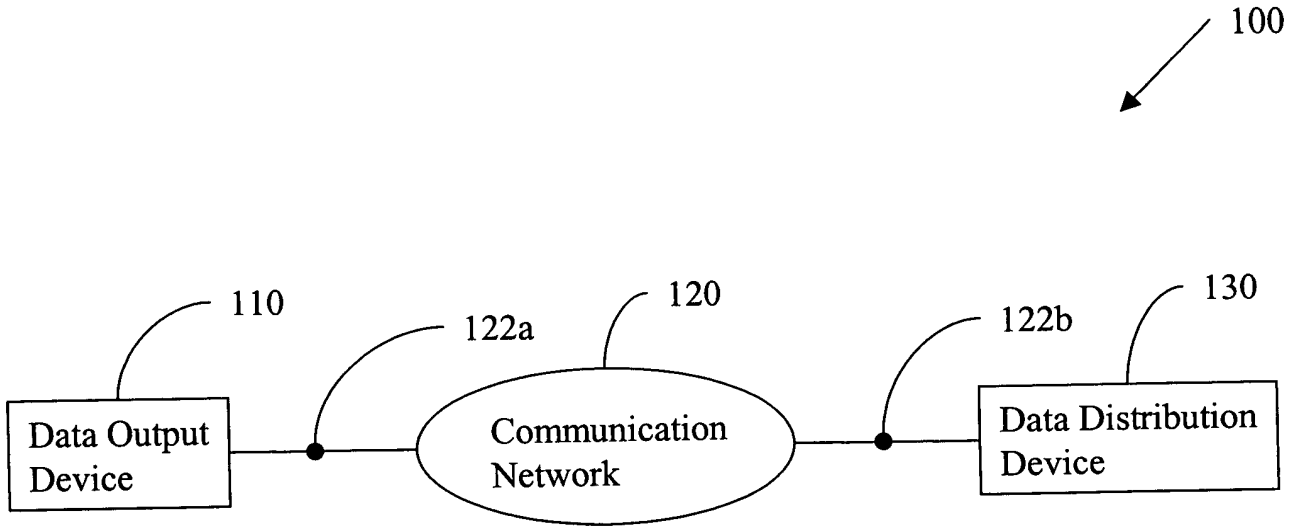
100
110
122a
120
122b
130
Data Output Device
Communication Network
Data Distribution Device

FIG. 1

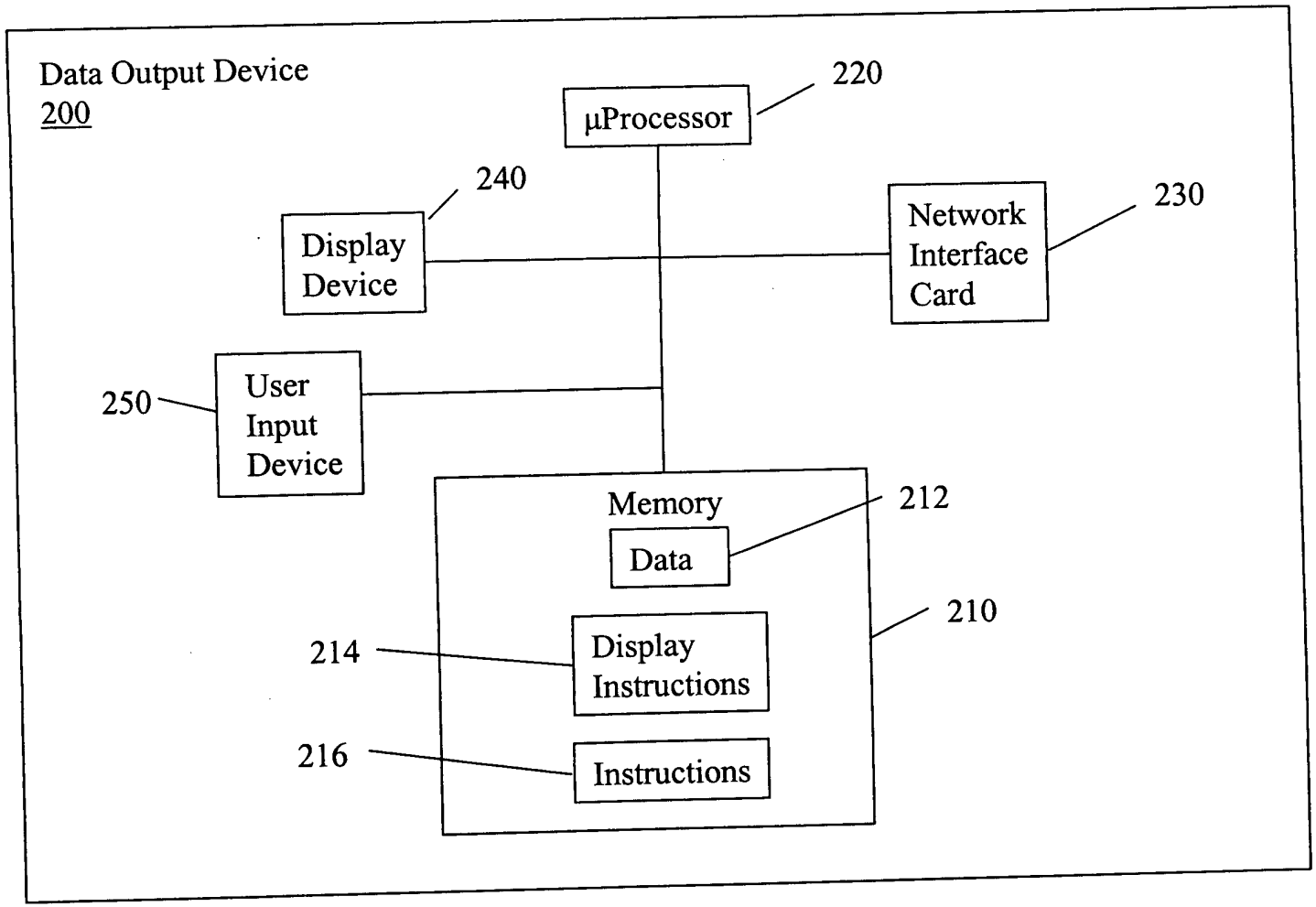
Data Output Device
200
µProcessor
220
240
Display Device
Network Interface Card
230
250
User Input Device
Memory
212
Data
210
214
Display Instructions
216
Instructions

FIG. 2

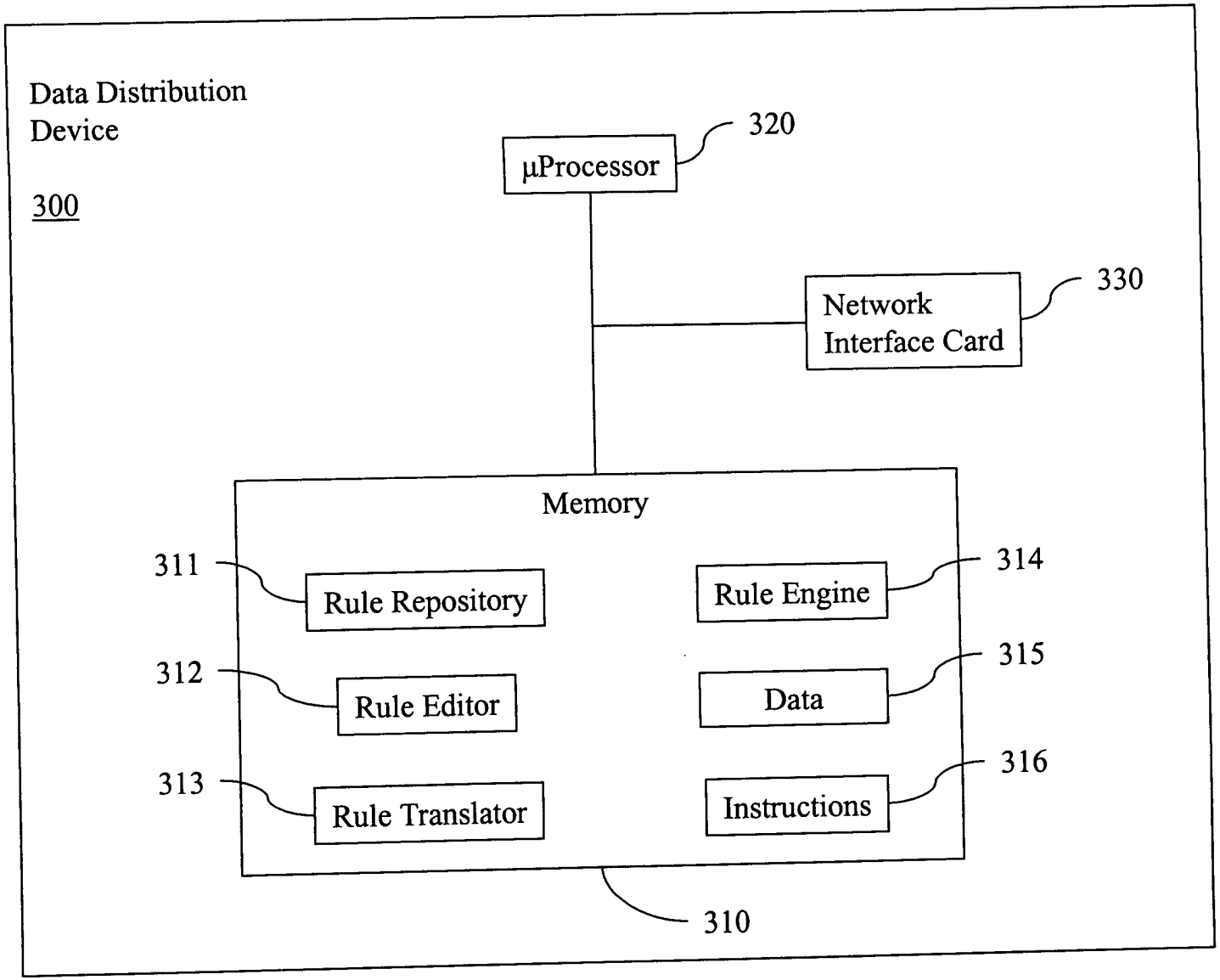
Data Distribution Device
300
µProcessor
320
Network Interface Card
330
Memory
311
Rule Repository
312
Rule Editor
313
Rule Translator
314
Rule Engine
315
Data
316
Instructions
310

FIG. 3

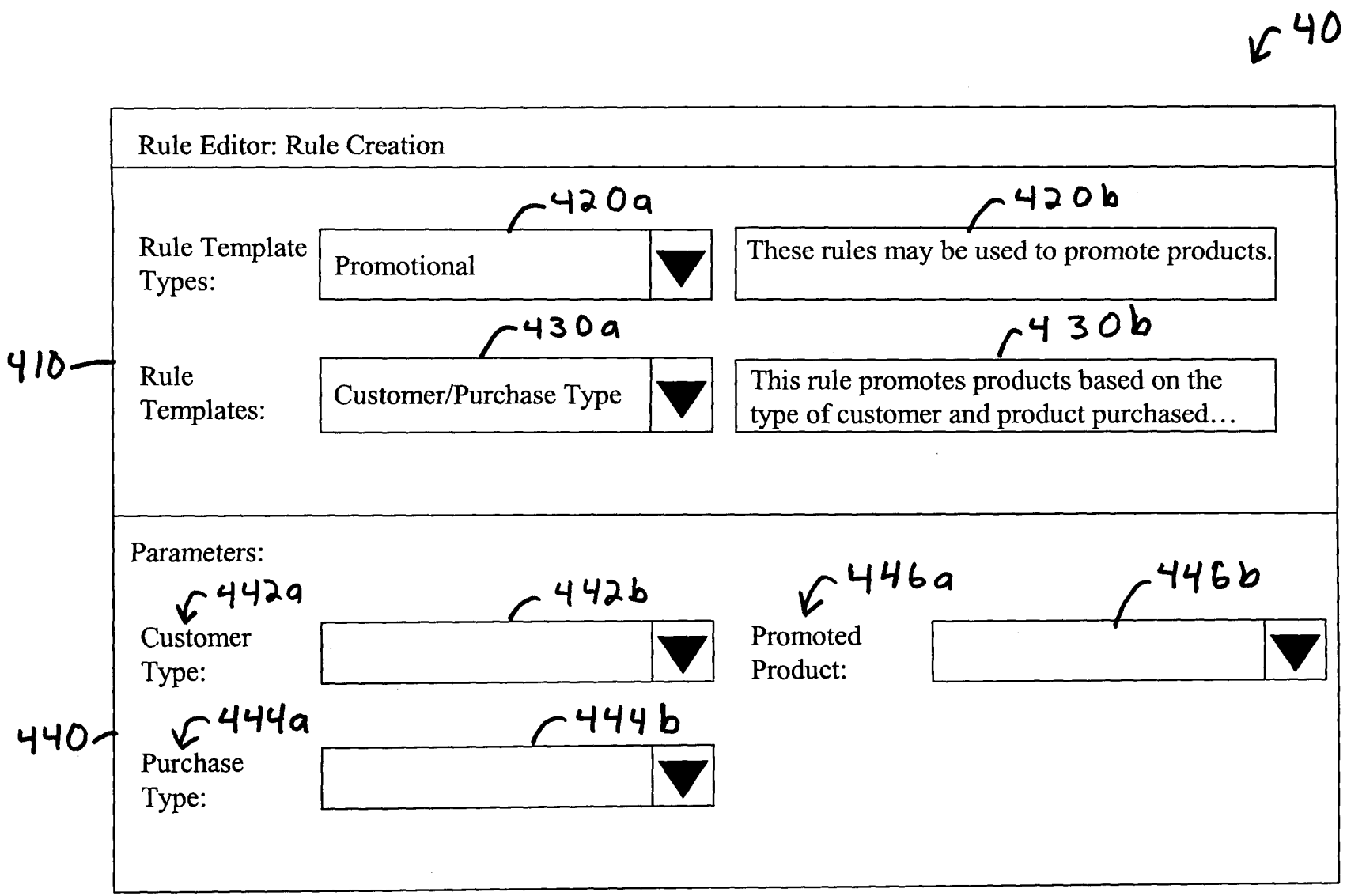
400
Rule Editor: Rule Creation
420a
420b
Rule Template Types:
Promotional
These rules may be used to promote products.
430a
430b
410
Rule Templates:
Customer/Purchase Type
This rule promotes products based on the type of customer and product purchased…
Parameters:
442a
442b
446a
446b
Customer Type:
Promoted Product:
440
444a
444b
Purchase Type:

FIG. 4

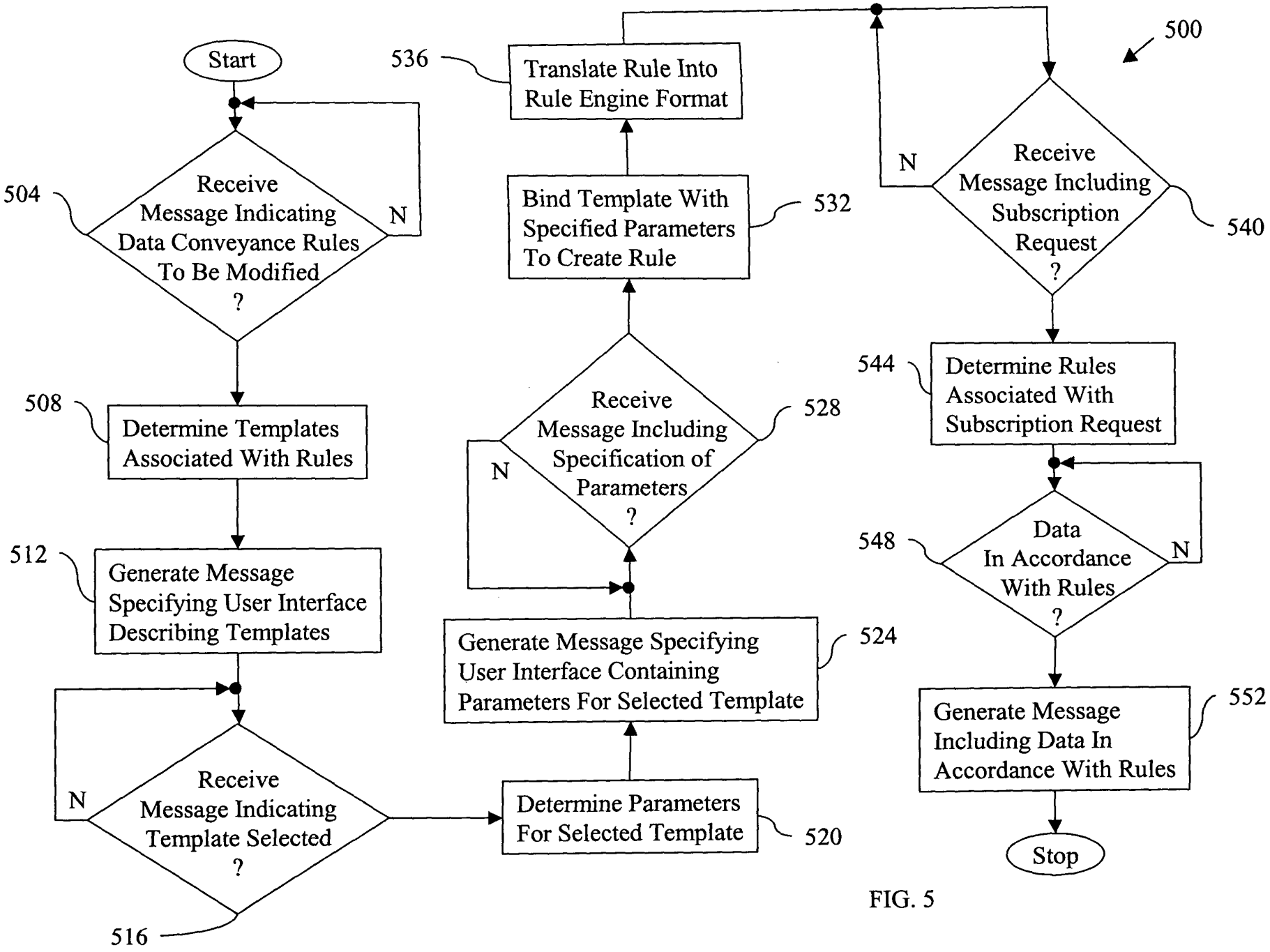
500
Start
504
Receive Message Indicating Data Conveyance Rules To Be Modified ?
N
508
Determine Templates Associated With Rules
512
Generate Message Specifying User Interface Describing Templates
N
Receive Message Indicating Template Selected ?
516
Determine Parameters For Selected Template
520
Generate Message Specifying User Interface Containing Parameters For Selected Template
524
N
Receive Message Including Specification of Parameters ?
528
Bind Template With Specified Parameters To Create Rule
532
536
Translate Rule Into Rule Engine Format
N
Receive Message Including Subscription Request ?
540
544
Determine Rules Associated With Subscription Request
548
Data In Accordance With Rules ?
N
552
Generate Message Including Data In Accordance With Rules
Stop

FIG. 5

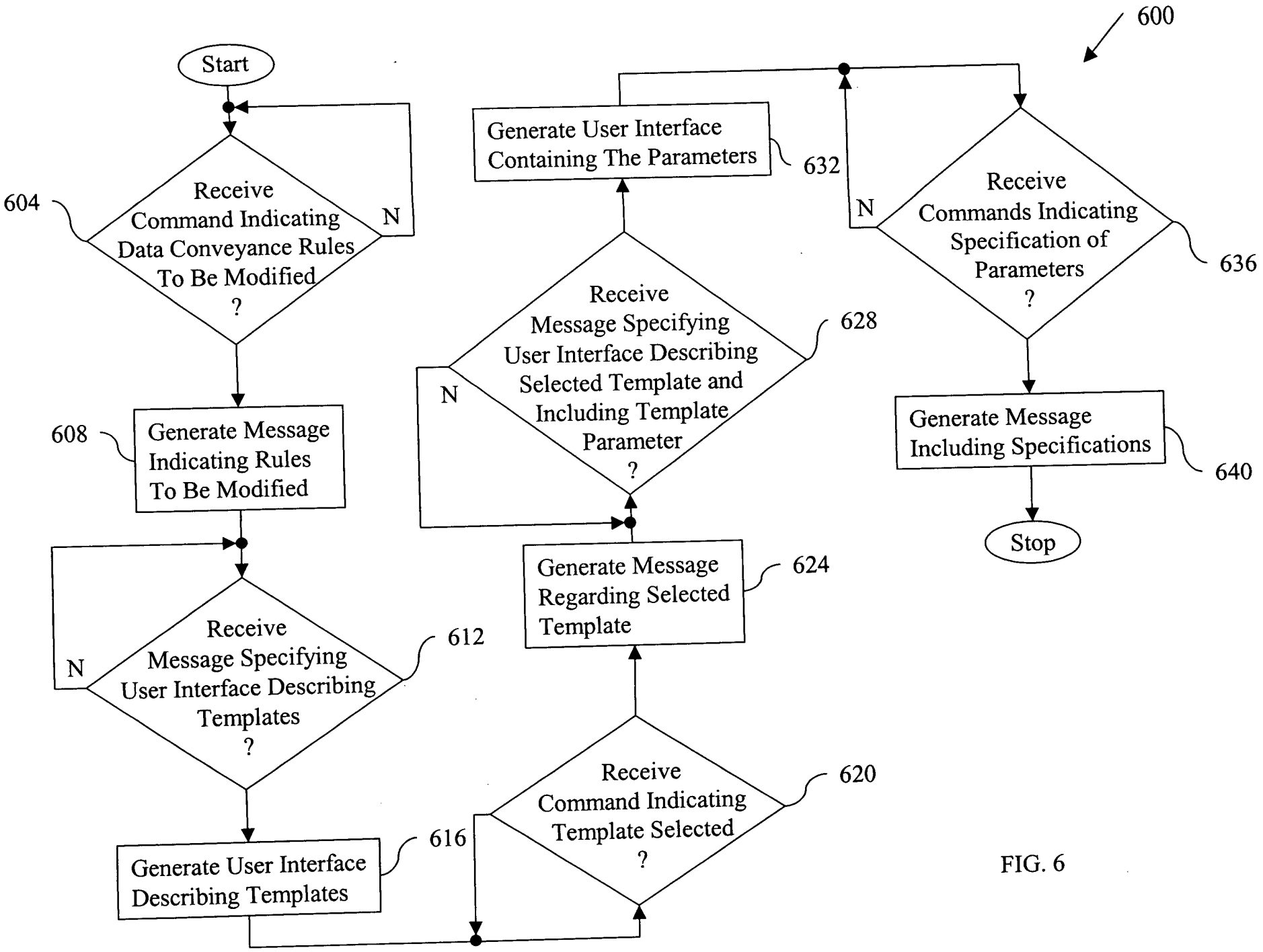
600
Start
604
Receive Command Indicating Data Conveyance Rules To Be Modified ?
N
608
Generate Message Indicating Rules To Be Modified
612
Receive Message Specifying User Interface Describing Templates ?
N
616
Generate User Interface Describing Templates
620
Receive Command Indicating Template Selected ?
624
Generate Message Regarding Selected Template
628
Receive Message Specifying User Interface Describing Selected Template and Including Template Parameter ?
N
632
Generate User Interface Containing The Parameters
636
Receive Commands Indicating Specification of Parameters ?
N
640
Generate Message Including Specifications
Stop

FIG. 6

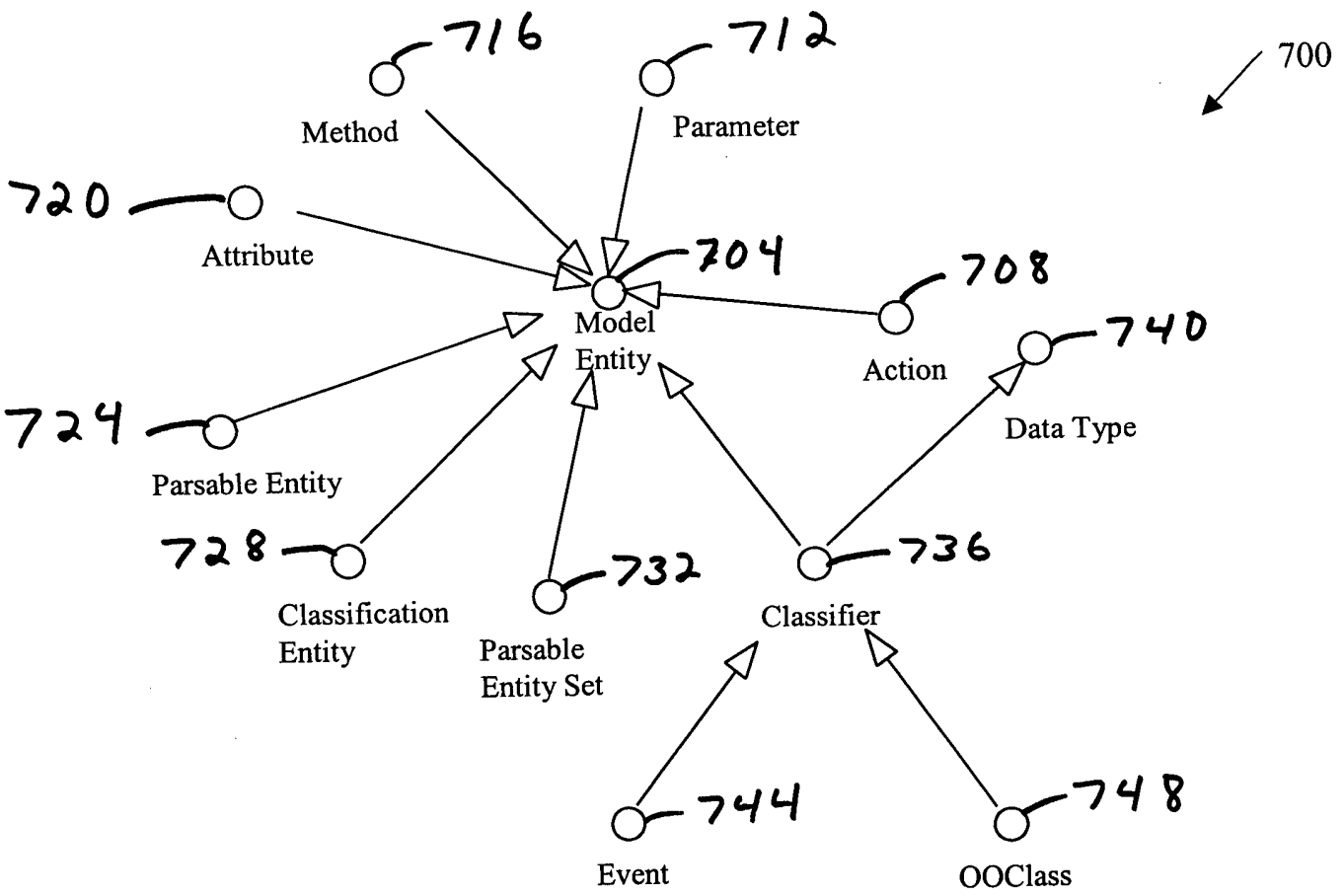
700
716
712
Method
Parameter
720
Attribute
704
708
Model
Entity
Action
740
724
Data Type
Parsable Entity
728
736
732
Classification
Entity
Parsable
Entity Set
Classifier
744
748
Event
OOClass

FIG. 7A

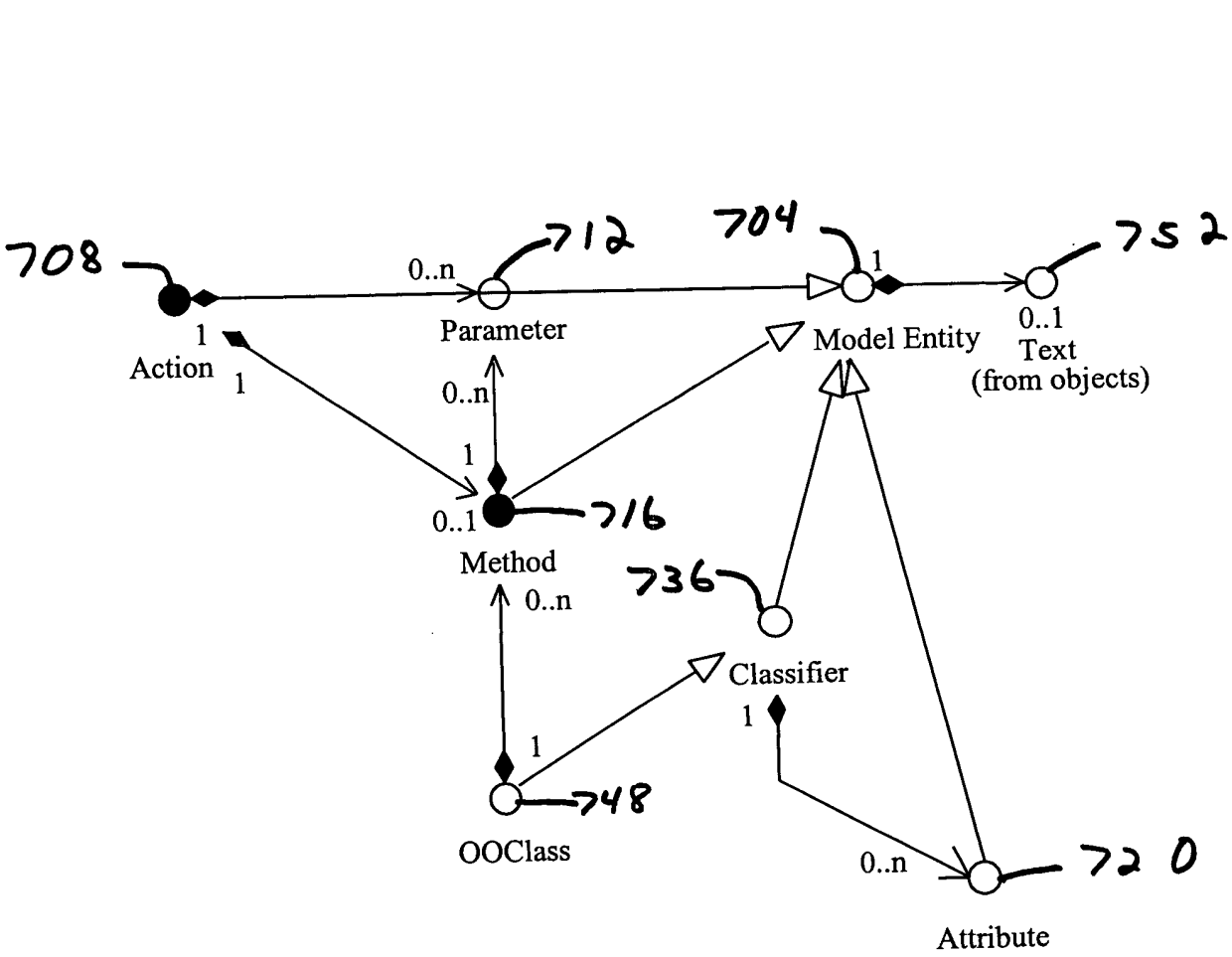
700
708
712
704
752
0..n
1
1
Action
Parameter
Model Entity
0..1
Text
(from objects)
0..n
1
0..1
716
Method
736
0..n
Classifier
1
1
748
OOClass
0..n
720
Attribute

FIG. 7B

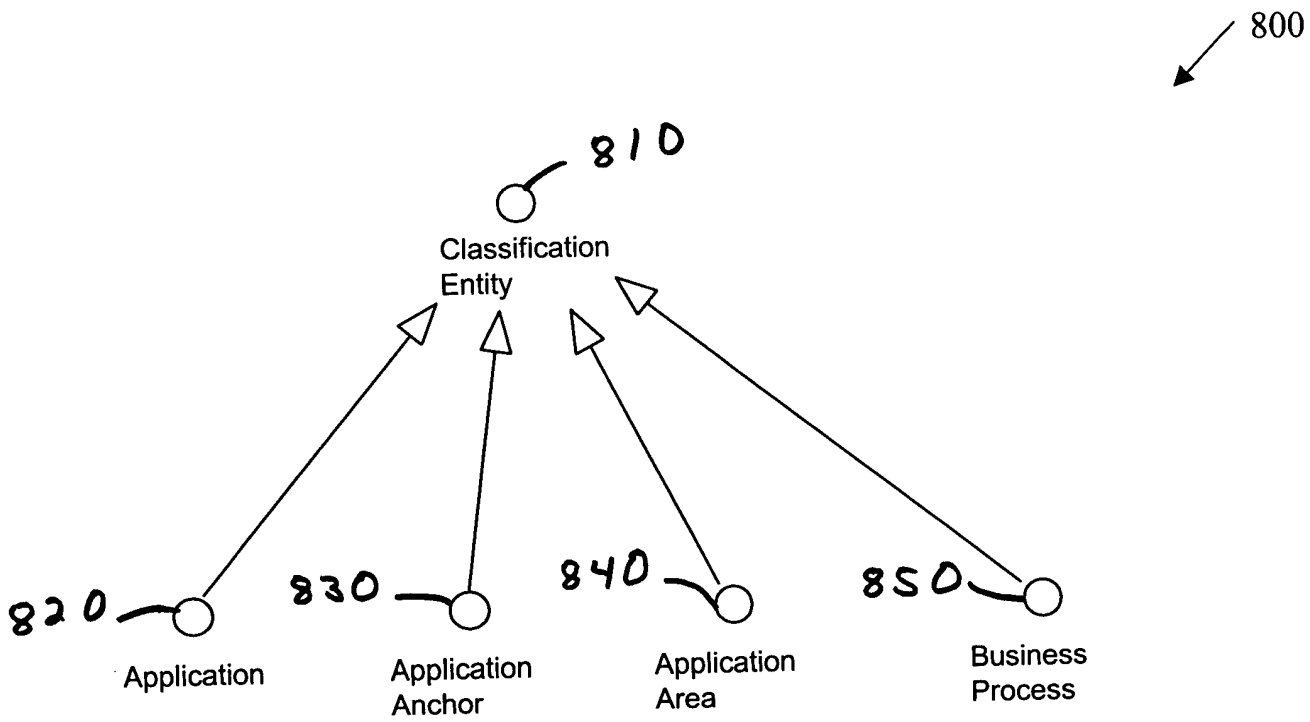
800
810
Classification Entity
820
Application
830
Application Anchor
840
Application Area
850
Business Process

FIG. 8

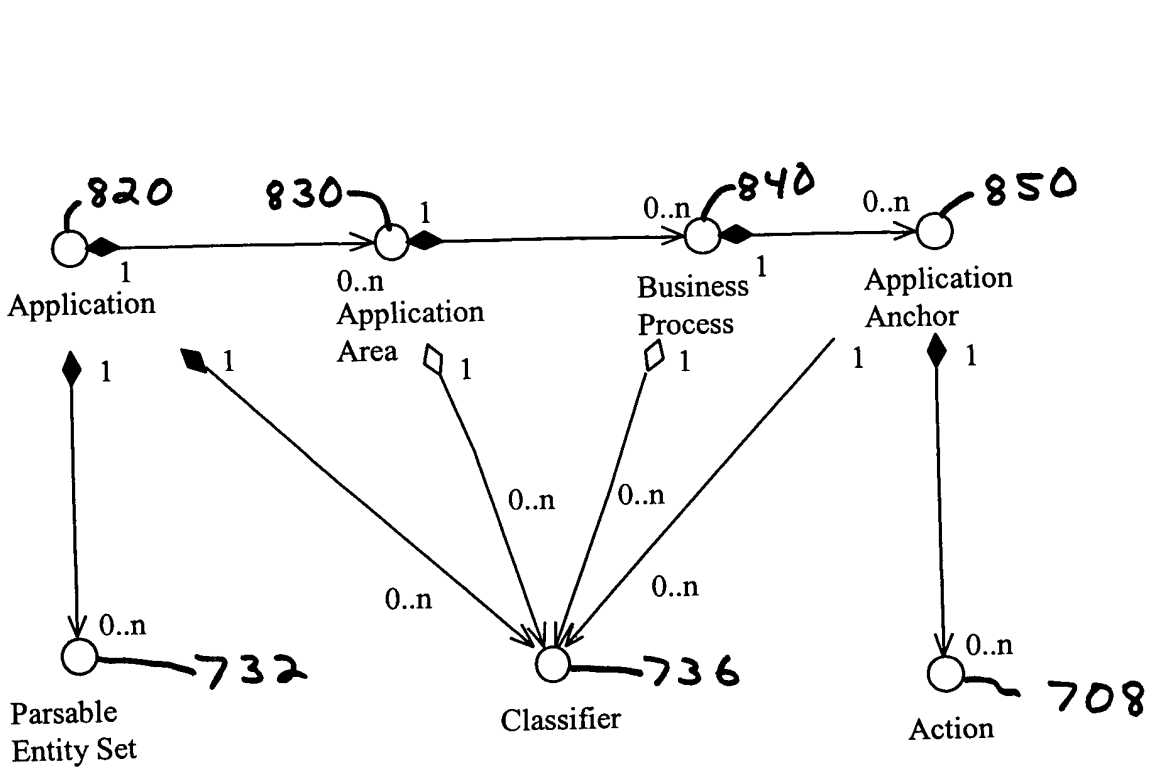
900
820
830
840
850
1
0..n
Application
Application Area
Business Process
Application Anchor
0..n
732
736
708
Parsable Entity Set
Classifier
Action

FIG. 9

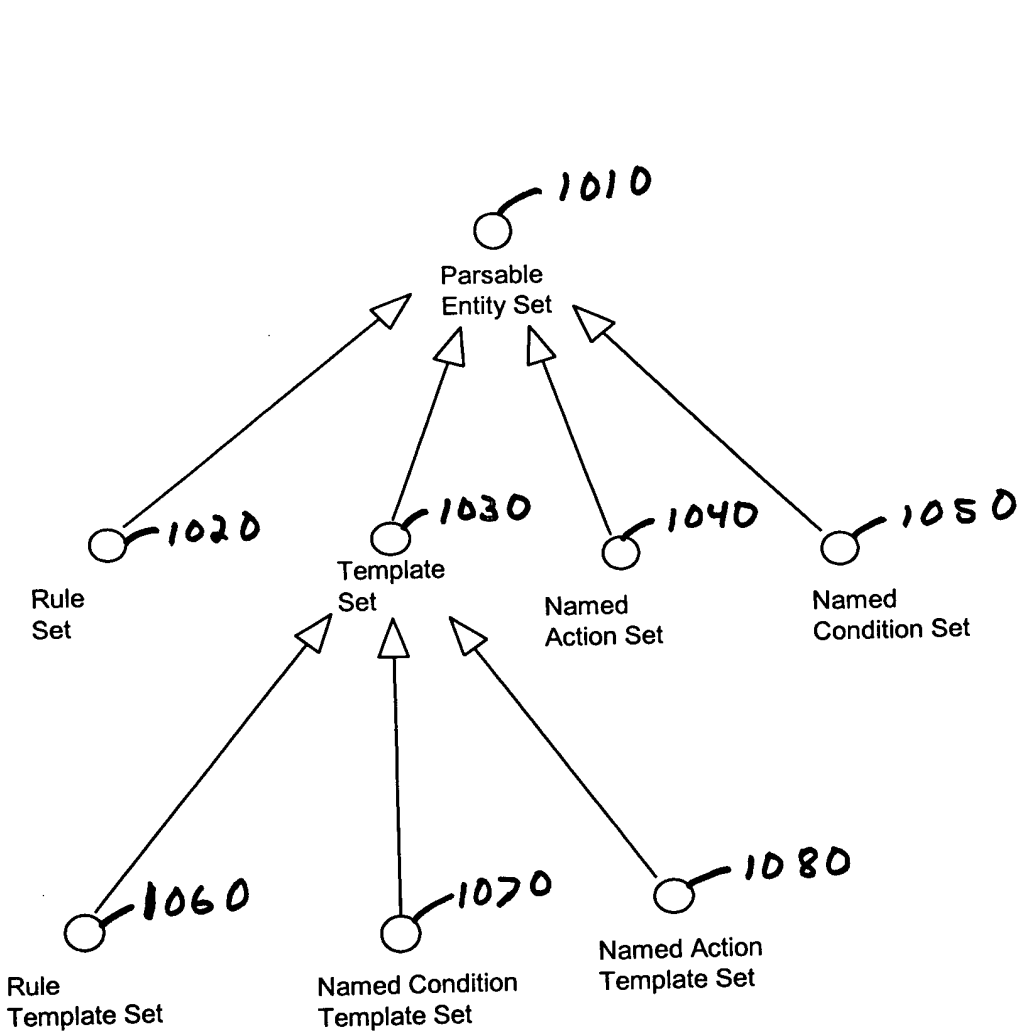
1000
1010
Parsable Entity Set
1020
Rule Set
1030
Template Set
1040
Named Action Set
1050
Named Condition Set
1060
Rule Template Set
1070
Named Condition Template Set
1080
Named Action Template Set

FIG. 10

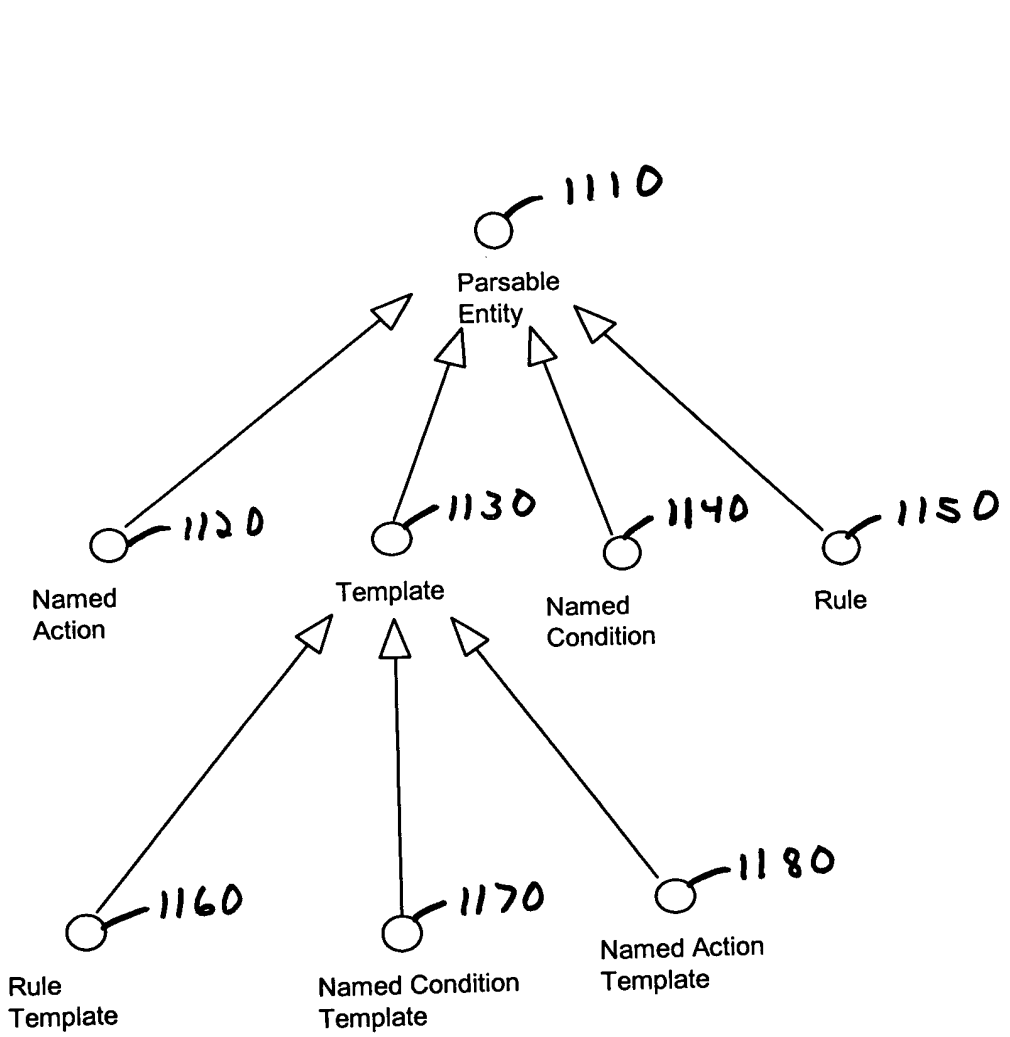
1100
1110
Parsable Entity
1120
Named Action
1130
Template
1140
Named Condition
1150
Rule
1160
Rule Template
1170
Named Condition Template
1180
Named Action Template

FIG. 11

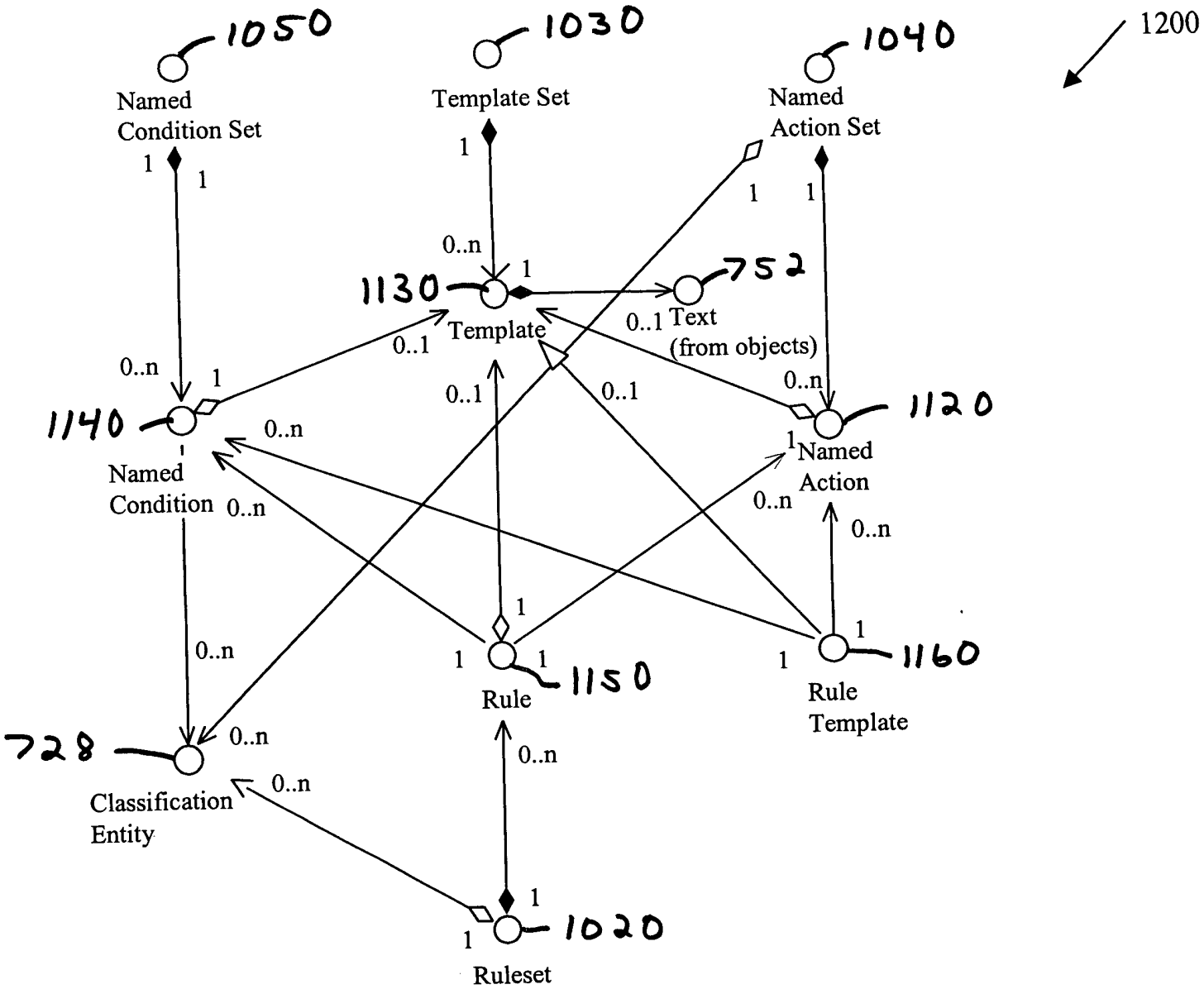
1200
1050
Named Condition Set
1030
Template Set
1040
Named Action Set
1130
Template
752
Text (from objects)
1140
Named Condition
1120
Named Action
1150
Rule
1160
Rule Template
728
Classification Entity
1020
Ruleset
1
0..n
0..1

FIG. 12

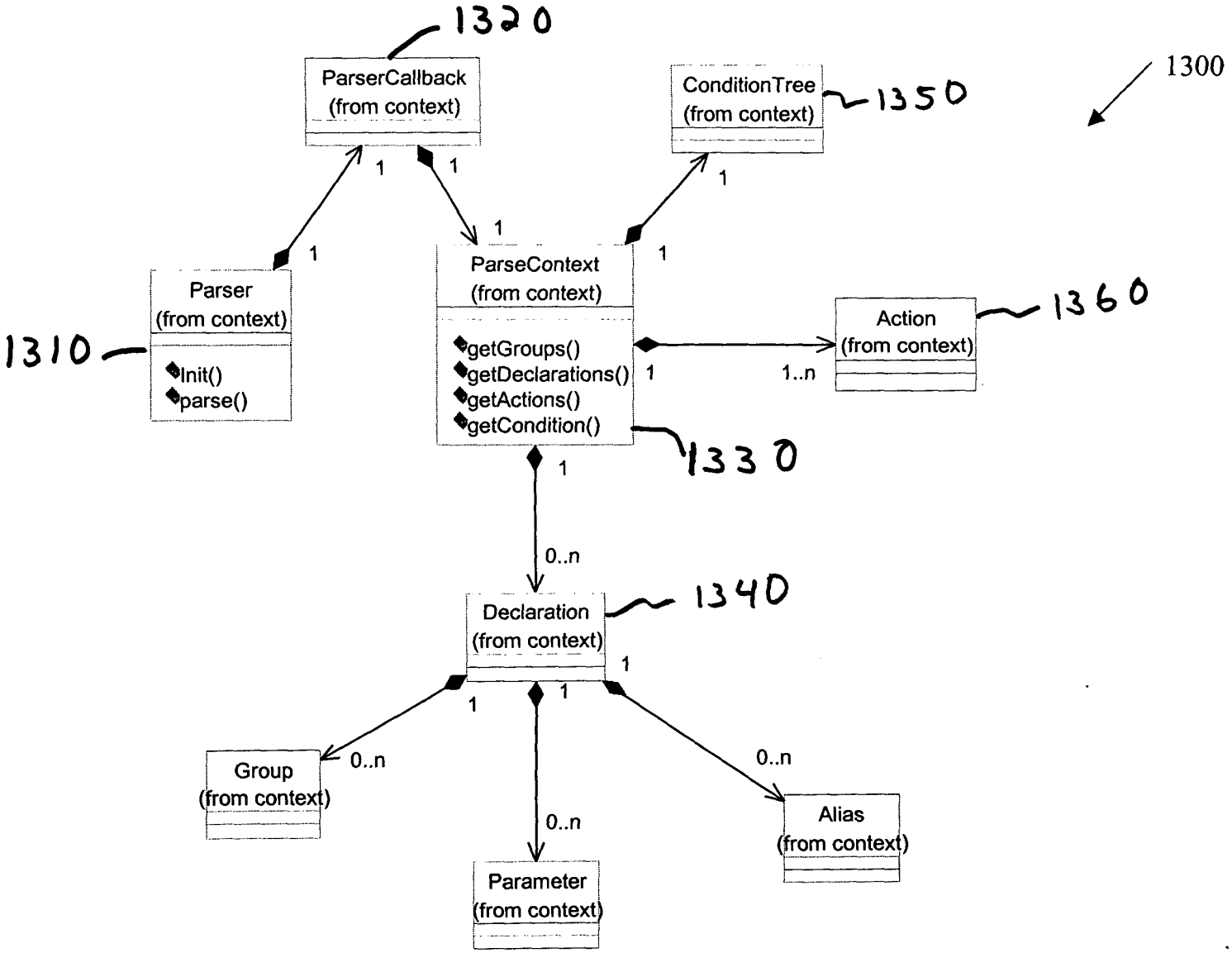
1320
ParserCallback
(from context)
ConditionTree
(from context)
1350
1300
1
1
1
1
1
1
Parser
(from context)
1310
Init()
parse()
ParseContext
(from context)
getGroups()
getDeclarations()
getActions()
getCondition()
1330
Action
(from context)
1360
1
1..n
1
0..n
Declaration
(from context)
1340
1
1
1
Group
(from context)
0..n
0..n
0..n
Alias
(from context)
Parameter
(from context)

FIG. 13

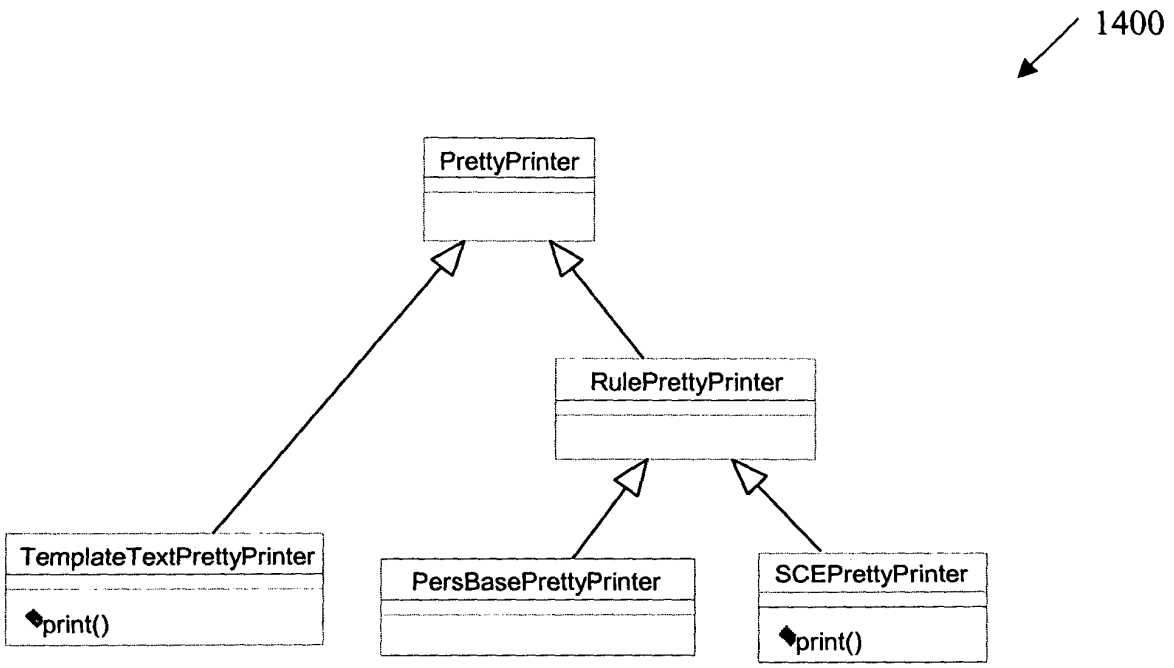
1400
PrettyPrinter
RulePrettyPrinter
TemplateTextPrettyPrinter
print()
PersBasePrettyPrinter
SCEPrettyPrinter
print()

FIG. 14

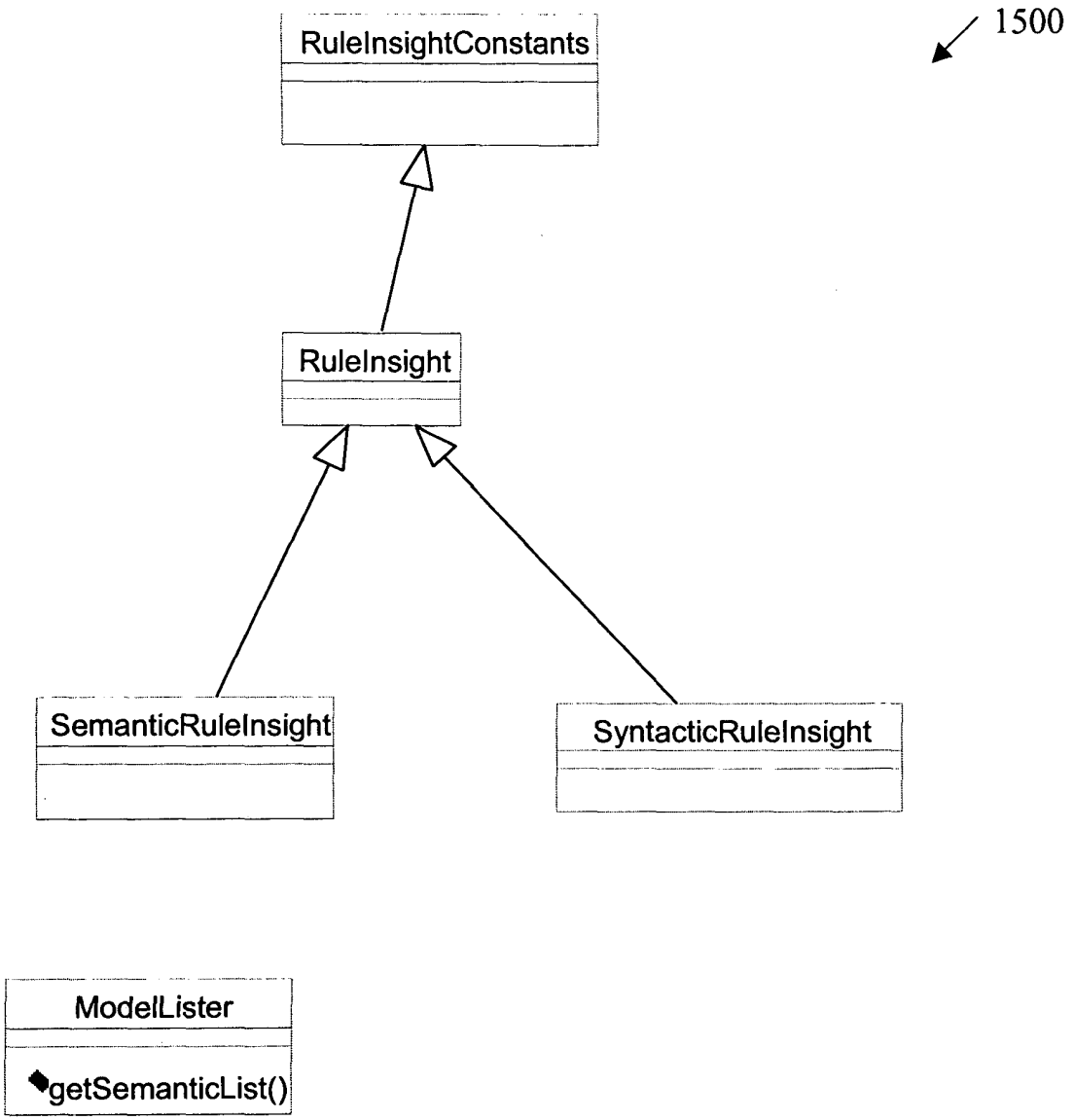
1500
RuleInsightConstants
RuleInsight
SemanticRuleInsight
SyntacticRuleInsight
ModelLister
getSemanticList()

FIG. 15